


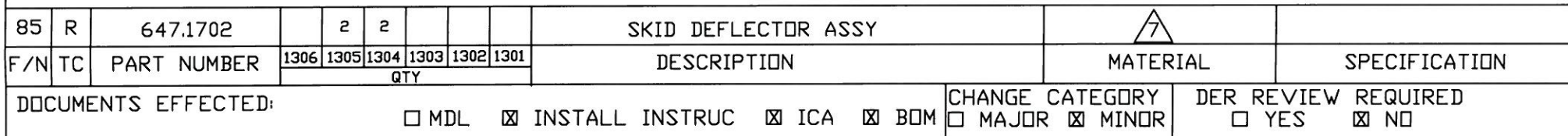


| | | | | | |
|---|--|--|--|-----------------|--|
| ENGINEERING CHANGE NOTICE NO. 04059 | | | | SHEET 1 OF 1 | |
| DWG NO. 647.1300 | | REV: B | PREPARED BY: J. BECKER | DATE: 08/13/13 | |
| EFFECT ON DWG <input checked="" type="checkbox"/> INC. <input type="checkbox"/> UNINC. | | | | | |
| DWG TITLE: EC145 CABLE CUTTERS KIT | | | | | |
| APPROVED BY: | ENGR  | MFG  | QC  | EFF: NEXT ORDER | |
| REASON: REVISED F/N'S. ADDED DELTA NOTE 7. | | | | | |



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NOTES: UNLESS OTHERWISE SPECIFIED

- 1 AFTER INSTALLATION, APPLY F/N 73 A/R TO FILL GAPS AND FILLET EDGES
2. APPLY F/N 74 TO FAYING SURFACES
- 3 AT CUSTOMERS OPTION, INSTALL F/N 77 BY MATCH DRILLING ONTO F/N 1
- 4 INSTALL FOR 647.1301, 647.1302.
- 5 INSTALL FOR 647.1304, 647.1305.
- 6 APPLICABLE WHEN EUROCOPTER P/N 145-250014.11 IS INSTALLED WITH EUROCOPTER CABLE CUTTER FIXED PROVISIONS.
- 7 APPLICABLE WHEN REPLACING EUROCOPTER P/N 145-250074.11

| REVISIONS | | | |
|-----------|--------------------------------------|----------|----------|
| REV. | DESCRIPTION | DATE | APPROVED |
| | LAST PROTOTYPE REVISION: PR3 | | N/C |
| N/C | INITIAL RELEASE | 08/05/09 | P. BRAVO |
| A | INCORPORATED ECN 02963, 03020, 03048 | 01/25/11 | P. BRAVO |
| B | INCORPORATED ECN 03919 | 07/05/13 | P. BRAVO |
| C | INCORPORATED ECN 04059 | 08/13/13 | P. BRAVO |

| | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|--------|----------|--|-------|-------|
| 13 | | 13 | 13 | | 13 | 26 | 647.1812 | SHIM | | |
| 4 | | 4 | 4 | | 4 | 25 | 647.1910 | CLIP | | |
| 1 | | 1 | 1 | | 1 | 24 | 647.1810 | NOSE DOOR DOUBLER | | |
| 1 | | 1 | 1 | | 1 | 23 | 647.1818 | NOSE DOOR SPACER | | |
| 2 | | 2 | 2 | | 2 | 22 | 647.1813 | ANGLE | | |
| 1 | | 1 | 1 | | 1 | 21 | 647.1913 | TEE | | |
| 1 | | 1 | 1 | | 1 | 20 | 647.1814 | GUSSET, LH | | |
| 1 | | 1 | 1 | | 1 | 19 | 647.1815 | GUSSET, RH | | |
| 1 | | 1 | 1 | | 1 | 18 | 647.1915 | SUPPORT ANGLE | | |
| | 2 | 2 | | 2 | 2 | 17 | 647.2011 | LOWER STRUT | | |
| 1 | | 1 | 1 | | 1 | 16 | 647.1914 | BRACKET | | |
| 1 | | 1 | 1 | | 1 | 15 | 647.1816 | SUPPORT, LH | | |
| 1 | | 1 | 1 | | 1 | 14 | 647.1817 | SUPPORT, RH | | |
| 1 | | 1 | 1 | | 1 | 13 | 647.1912 | BRACKET, LH | | |
| 1 | | 1 | 1 | | 1 | 12 | 647.1911 | BRACKET, RH | | |
| 4 | | 4 | 4 | 4 | 8 | 11 | 647.0112 | STRUT BRACKET | | |
| | | | | 1 | 1 | 10 | 647.2110 | LOWER RAIL | | |
| | | | 1 | | 1 | 9 | 647.2111 | UPPER RAIL | | |
| 1 | | 1 | 1 | | 1 | 8 | 647.1610 | WIPER DEFLECTOR, FWD | | |
| 1 | | 1 | 1 | | 1 | 7 | 647.1601 | WIPER DEFLECTOR ASSY, AFT | | |
| | | | | 2 | 2 | 6 | 647.1701 | SKID DEFLECTOR ASSY | | |
| 1 | | 1 | 1 | | 1 | 5 | 647.3201 | GROUNDING CABLE ASSY | | |
| 1 | | 1 | 1 | | 1 | 4 | 647.2201 | CROSS ASSY | | |
| 1 | | 1 | 1 | | 1 | 3 | 647.1602 | DOUBLER ASSY | | |
| | 1 | 1 | | 1 | 1 | 2 | 647.1402 | CUTTER ASSY (LOWER) | | |
| | | | | 1 | 1 | 1 | 647.1401 | CUTTER ASSY (UPPER) | | |
| | | | | | | | 647.1306 | FIXED PROVISIONS KIT U CHANNEL | | |
| | | | | | | | 647.1305 | REMOVABLE PROVISIONS KIT U CHANNEL | | 6 |
| | | | | | | | 647.1304 | EC145 CABLE CUTTERS KIT U CHANNEL COMPATIBLE | | 6 |
| | | | | | | | 647.1303 | FIXED PROVISIONS KIT | | |
| | | | | | | | 647.1302 | REMOVABLE PROVISIONS KIT | | |
| | | | | | | | 647.1301 | EC145 CABLE CUTTERS KIT | | |
| .1306 | .1305 | .1304 | .1303 | .1302 | .1301 | FIND # | PART # | DESCRIPTION | MAT'L | SPEC. |

BOM Table(Restructured)

| QTY | | PARTS LIST | | | |
|---------------|--|---|---|----------------------|-----------|
| NEXT ASSY (S) | | ORIGINAL DATE (MO-DA-YR) 07/06/09 | APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 | | |
| | | DRAWN BY R. ROSANO | | | |
| | | CHECKER D. BARKER | EC145 CABLE CUTTERS KIT | | |
| | | DRAWING APPROVAL P. BRAVO 08/05/09 | | | |
| | | CONTRACT No. | 647.1300 | | |
| | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.03 3 PLACE DECIMALS ±.010 ANGLES ±.5° | | | |
| | | SIZE B | CAGE CODE 07MZ6 | DWG. NO. 647.1300 | REV. C |
| | | SCALE NONE | | SHEET 1 OF 9 | |

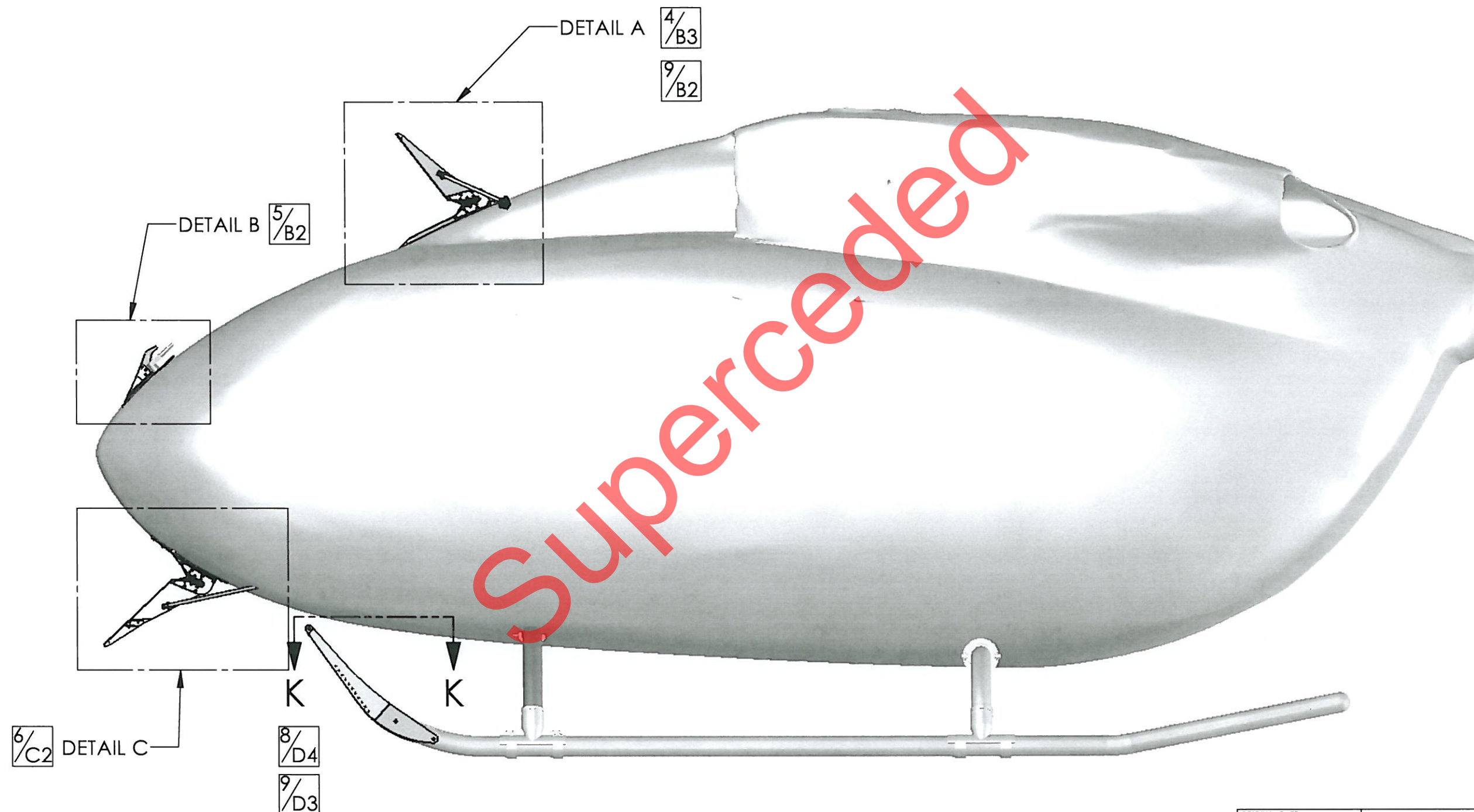
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|-------|-------|-------|-------|-------|-------|--------|----------|----------------|---------------|-------|
| 22 | | 22 | 22 | | 22 | 58 | 601.0790 | RIVET | CR3213-4-3 | |
| 8 | | 8 | 8 | | 8 | 57 | 601.2995 | RIVET | CR3213-6-6 | |
| 4 | | 4 | 4 | | 32 | 56 | 601.1915 | RIVET | CR3213-4-4 | |
| 12 | | 12 | 12 | | 12 | 55 | 601.2207 | NUTPLATE RIVET | CCR264SS-3-03 | |
| 4 | | 4 | 4 | | 4 | 54 | 601.1983 | NUTPLATE RIVET | CCR274SS-3-03 | |
| 12 | | 12 | 12 | | 12 | 53 | 601.2980 | NUTPLATE RIVET | CCR264SS-3-04 | |
| 12 | | 12 | 12 | | 12 | 52 | 600.0795 | NUTPLATE | MS21047-3 | |
| | 4 | 4 | | 4 | 4 | 51 | 601.3209 | LOCKNUT | MS21042L4 | |
| 5 | 4 | 9 | 5 | 4 | 9 | 50 | 601.2973 | LOCKNUT | MS21042-08 | |
| 29 | 17 | 46 | 29 | 16 | 45 | 49 | 601.2943 | LOCKNUT | MS21042-3 | |
| 3 | | 3 | 3 | | 3 | 48 | 601.2375 | WASHER | | |
| 10 | 8 | 18 | 10 | 8 | 18 | 47 | 601.2764 | WASHER | NAS1149FN832P | |
| | 70 | 32 | 70 | 32 | 102 | 46 | 601.1607 | WASHER | NAS1149F0332P | |
| 1 | | 1 | 1 | | 1 | 45 | 601.2525 | SCREW | MS27039-0807 | |
| 4 | | 4 | 4 | | 4 | 44 | 601.1952 | SCREW | MS27039-1-20 | |
| | 4 | 4 | | 4 | 4 | 43 | 601.3010 | SCREW | MS27039-0810 | |
| 4 | | 4 | 4 | | 4 | 42 | 601.3224 | SCREW | AN525-10R12 | |
| 6 | | 6 | 6 | | 6 | 41 | 601.1365 | SCREW | MS27039-1-10 | |
| 3 | | 3 | 3 | | 3 | 40 | 601.2198 | SCREW | MS27039-1-07 | |
| 3 | | 3 | 3 | | 3 | 39 | 601.2999 | SCREW | | |
| 18 | | 18 | 18 | | 18 | 38 | 601.2459 | SCREW | MS27039C1-06 | |
| 4 | | 4 | 4 | | 4 | 37 | 601.1622 | SCREW | MS27039-1-14 | |
| 10 | | 10 | 10 | | 10 | 36 | 601.2051 | SCREW | MS24694C52 | |
| 2 | | 2 | 2 | | 2 | 35 | 601.2823 | BOLT | AN3-4A | |
| 1 | | 1 | 1 | | 1 | 34 | 601.1324 | BOLT | AN4CH6A | |
| | 2 | 2 | | 2 | 2 | 33 | 601.1874 | BOLT | AN3C10A | |
| | 12 | 12 | | 16 | 16 | 32 | 601.2826 | BOLT | AN3-11A | |
| 8 | | 8 | 8 | | 8 | 31 | 601.2638 | WASHER | NAS1149F0432P | |
| 4 | | 4 | 4 | | 4 | 30 | 601.3002 | BOLT | NAS6604-66 | |
| 2 | | 2 | 2 | | 2 | 29 | 647.1811 | SPACER | | |
| 4 | | 4 | 4 | | 4 | 28 | 647.2511 | NUT | | |
| 4 | | 4 | 4 | | 4 | 27 | 647.2510 | SLEEVE | | |
| .1306 | .1305 | .1304 | .1303 | .1302 | .1301 | FIND # | PART # | DESCRIPTION | MAT'L | SPEC. |

BOM Table(Restructured)

| | | | | | |
|--|----------------------|---|--------------|--|------|
| ORIGINAL DATE (MO-DA-YR) | 02-01-06 | <h1>APICAL INDUSTRIES</h1> <p>2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300</p> | | | |
| DRAWN BY R. ROSANO | CHECKER D. BARKER | | | | |
| DRAWING APPROVAL P. BRAVO 08/05/09 | | | | | |
| CONTRACT NO. | | <h2>EC145 CABLE CUTTERS KIT</h2> | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.03 3 PLACE DECIMALS ±.010 ANGLES ± .5° | | | | | |
| SIZE | CAGE CODE | DWG. NO. | | | REV. |
| B | 07MZ6 | 647.1300 | | | C |
| SCALE NONE | | | SHEET 2 OF 9 | | |

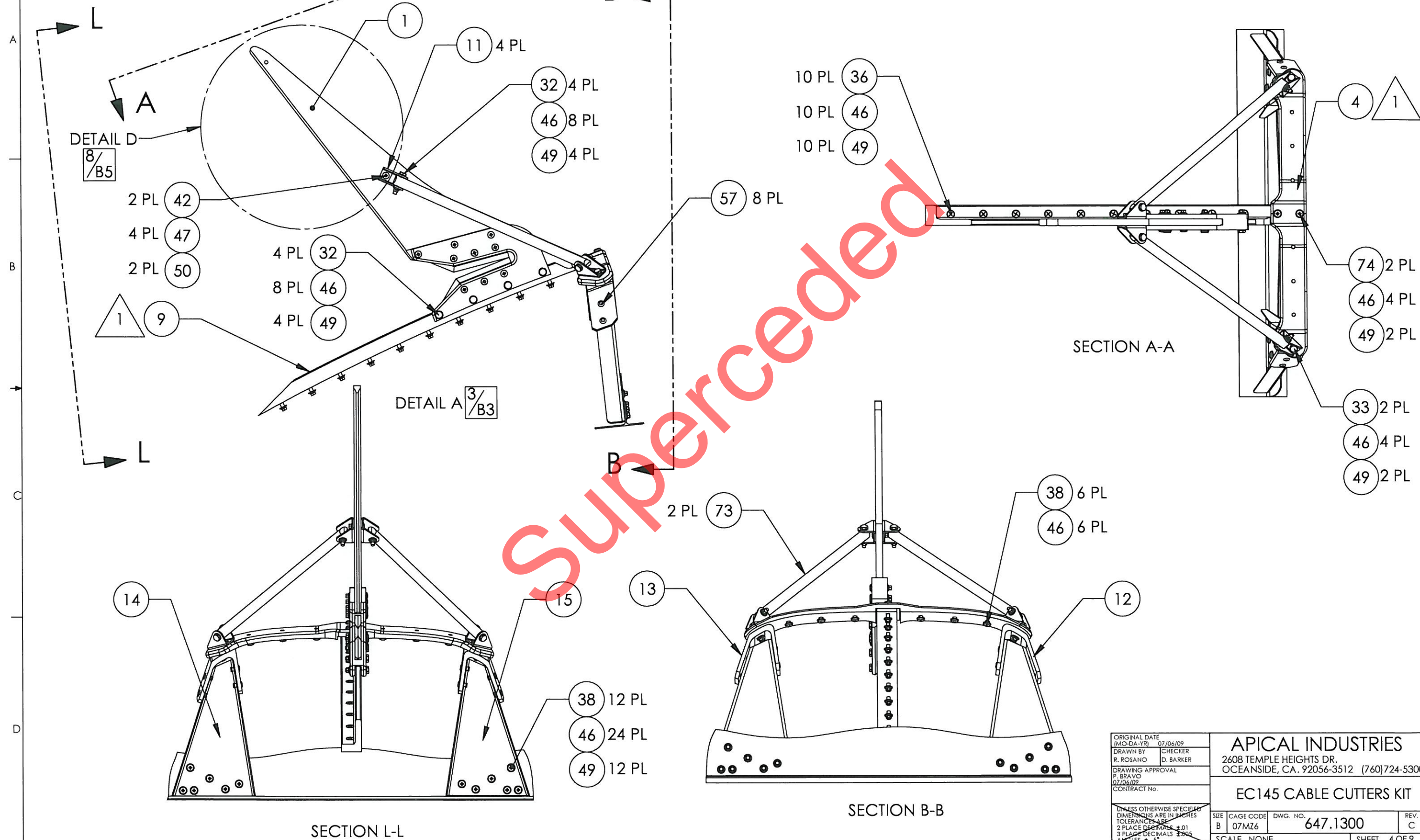
1 2 3 4 5 6 7 8

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| | | | |
|---|--|--|--|
| ORIGINAL DATE (MO-DA-YR) 07/06/09 | | APICAL INDUSTRIES | |
| DRAWN BY R. ROSANO | | 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 | |
| CHECKER D. BARKER | | EC145 CABLE CUTTERS KIT | |
| DRAWING APPROVAL P. BRAVO | | DWG. NO. 647.1300 | |
| 07/06/09 | | REV. C | |
| CONTRACT No. | | SCALE NONE | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5° | | SHEET 3 OF 9 | |

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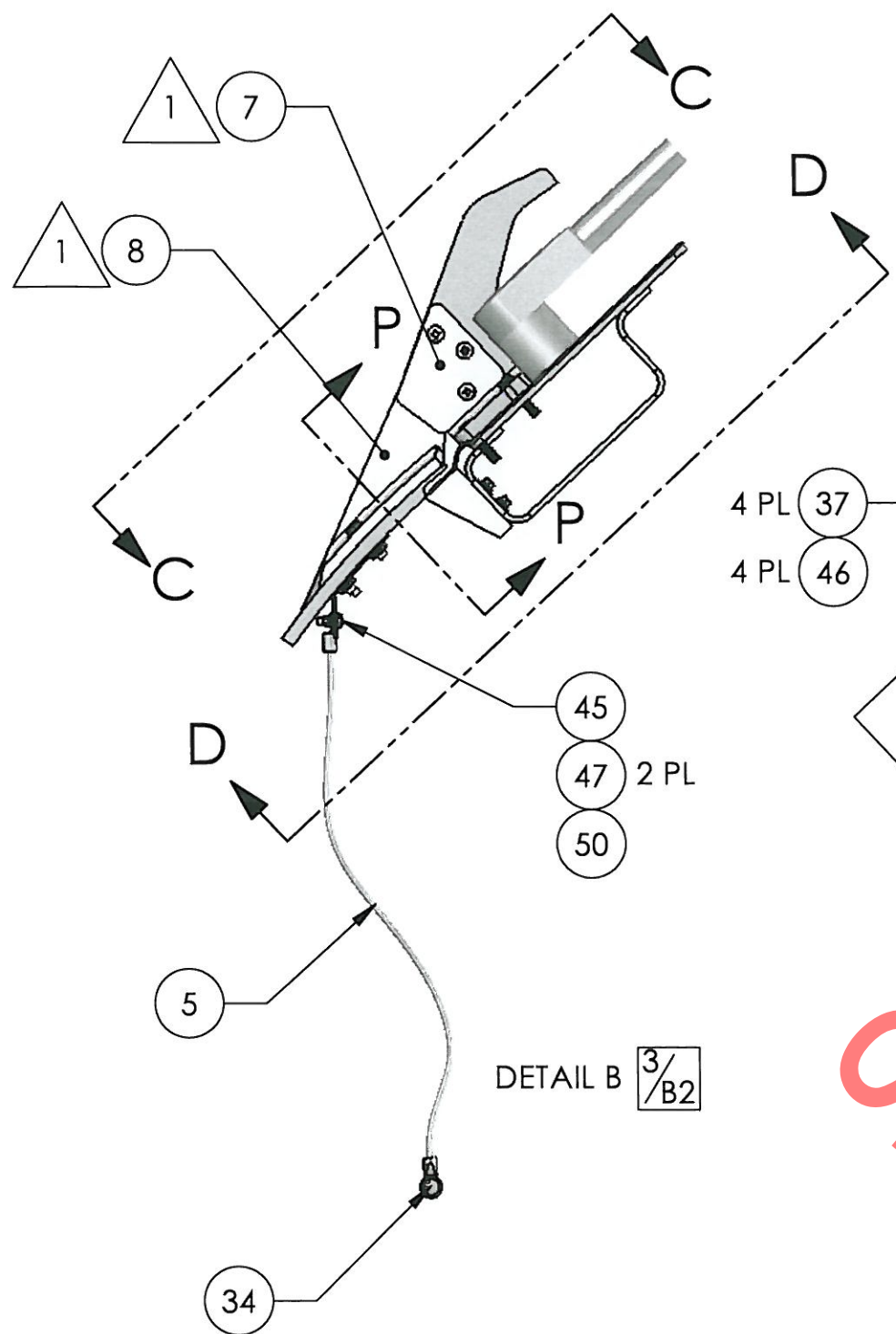
ORIGINAL DATE
(MO-DA-YR) 07/06/09
DRAWN BY R. ROSANO
CHECKER D. BARKER
DRAWING APPROVAL
P. BRAVO
07/06/09
CONTRACT No.
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS $\pm .01$
3 PLACE DECIMALS $\pm .005$
ANGLES $\pm .5^\circ$

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

EC145 CABLE CUTTERS KIT

| SIZE | CAGE CODE | DWG. NO. | REV. |
|------------|-----------|----------|--------------|
| B | 07MZ6 | 647.1300 | C |
| SCALE NONE | | | SHEET 4 OF 9 |

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4 PL 37
4 PL 46

39 3 PL
48 3 PL

SECTION C-C

SECTION D-D

SECTION P-P

ORIGINAL DATE
(MO-DA-YR) 07/06/09
DRAWN BY
R. ROSANO
CHECKER
D. BARKER
DRAWING APPROVAL
P. BRAVO
07/06/09
CONTRACT NO.

UNLESS OTHERWISE SPECIFIED
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3 PLACE DECIMALS $\pm .005$
ANGLES $\pm .5^\circ$

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

EC145 CABLE CUTTERS KIT

| SIZE | CAGE CODE | DWG. NO. | REV. |
|------------|-----------|----------|--------------|
| B | 07M26 | 647.1300 | C |
| SCALE NONE | | | SHEET 5 OF 9 |

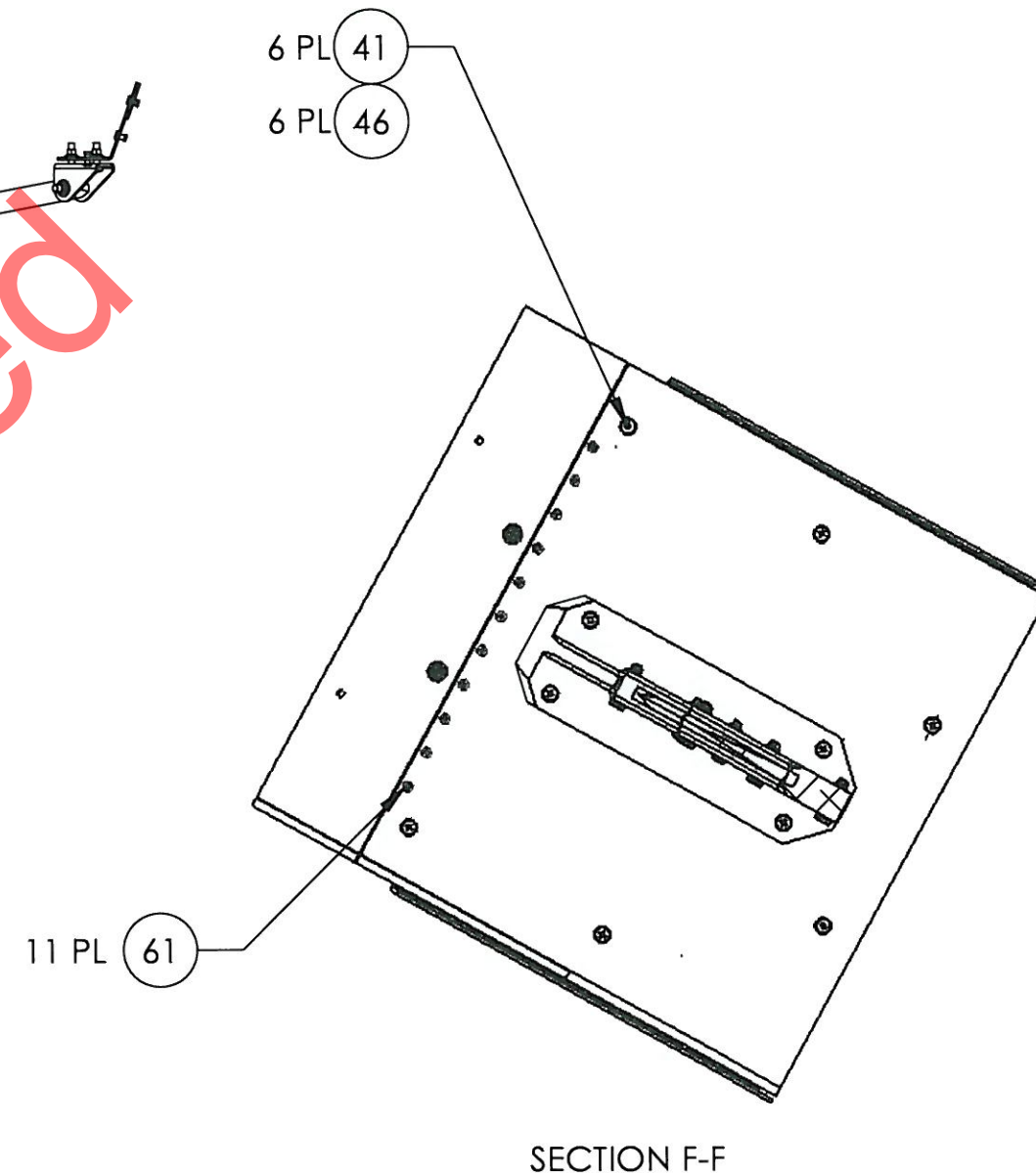
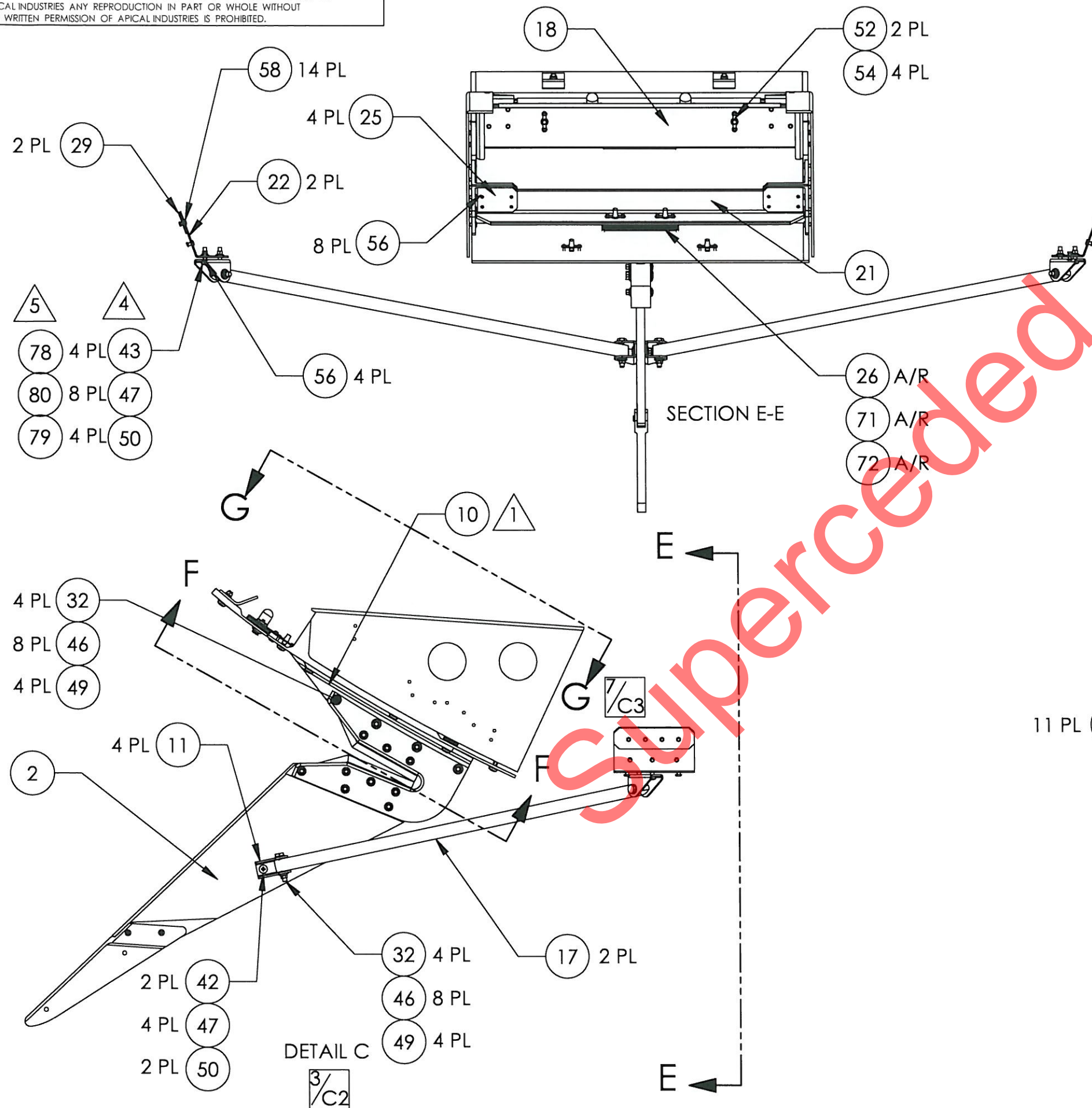
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A

B

C

D



| | | | |
|--------------------------------------|--|---|--------------------|
| ORIGINAL DATE (MO-DA-YR) 07/04/09 | | APICAL INDUSTRIES | |
| DRAWN BY R. ROSANO | | 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 | |
| CHECKER D. BARKER | | EC145 CABLE CUTTERS KIT | |
| DRAWING APPROVAL P. BRAVO | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5° | |
| CONTRACT No. | | SIZE B | CAGE CODE 07M26 |
| | | DWG. NO. 647.1300 | REV. C |
| | | SCALE NONE | SHEET 6 OF 9 |

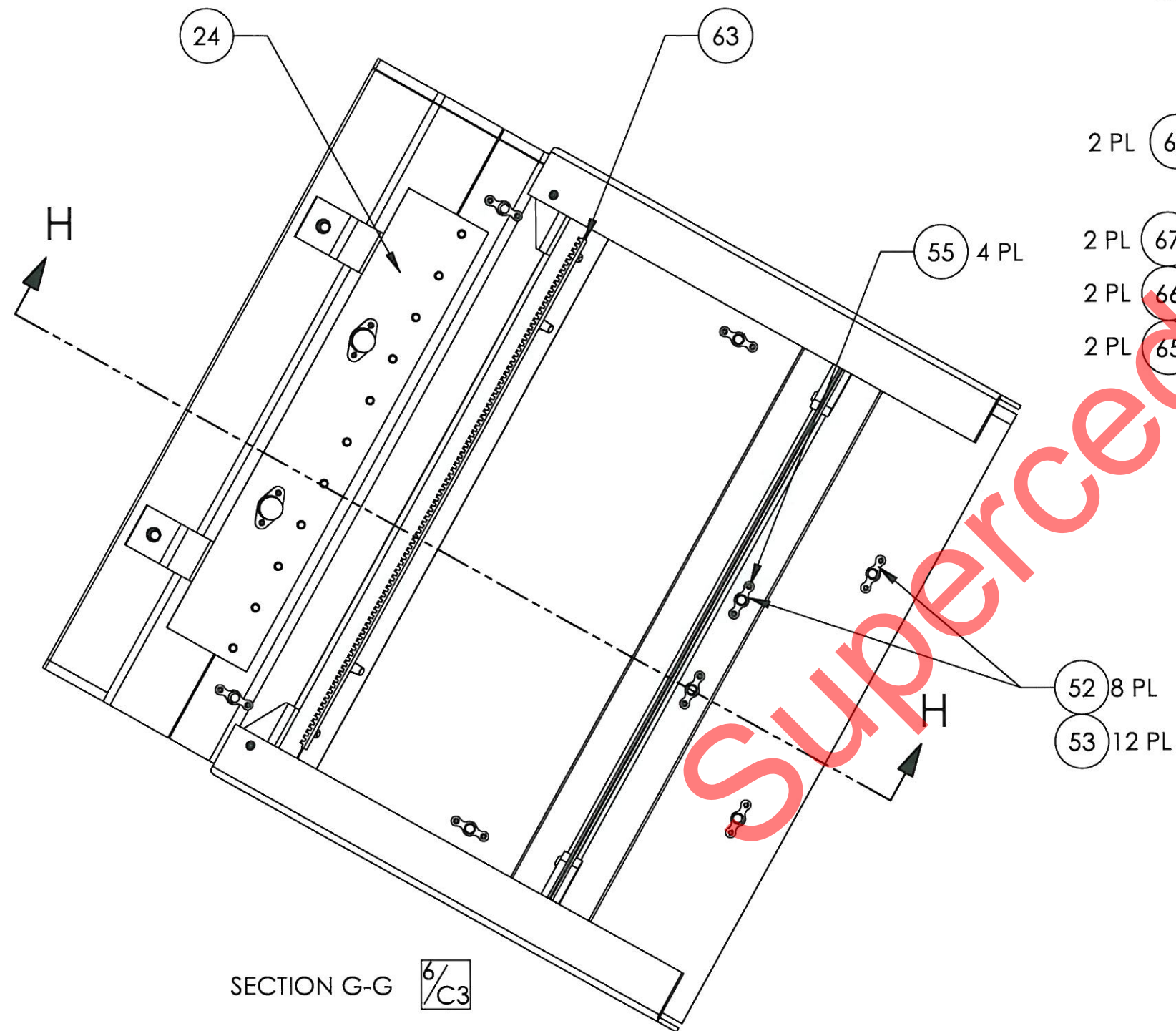
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A

B

C

D



SECTION G-G $\frac{6}{C3}$

SHOWN 19

OPPOSITE 20

4 PL 55

2 PL 60

$\frac{8}{B2}$

56 4 PL

2 PL 64

2 PL 67

2 PL 66

2 PL 65

2 PL 62

2 PL 44 OR 70

2 PL 46

52 8 PL

53 12 PL

SECTION H-H

59 8 PL

56 16 PL

44 OR 70 2 PL

46 2 PL

ORIGINAL DATE
(MO-DA-YR) 07/06/09
DRAWN BY
R. ROSANO
CHECKER
D. BARKER
DRAWING APPROVAL
P. BRAVO
07/06/09
CONTRACT No.

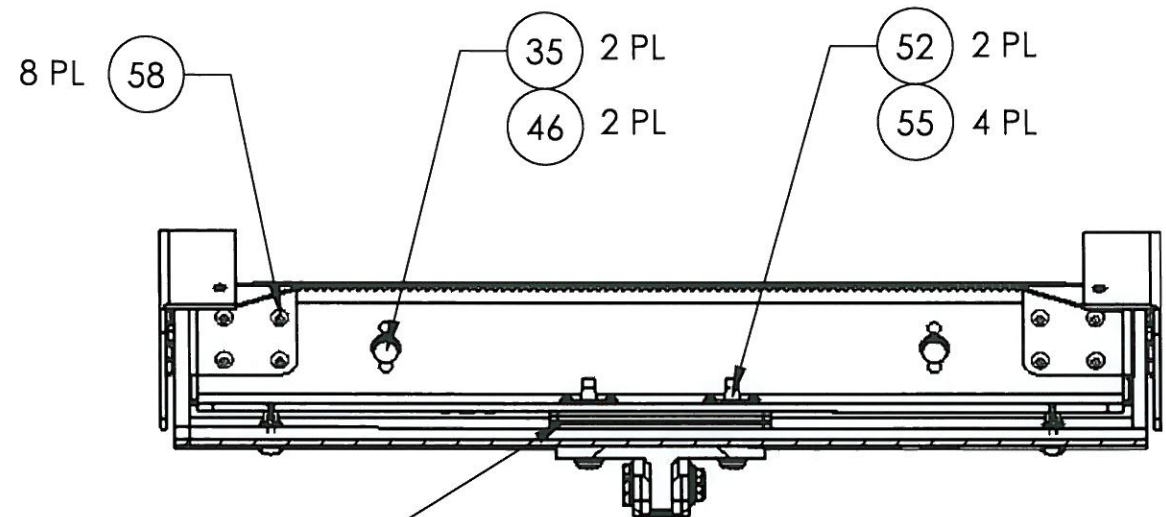
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
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3 PLACE DECIMALS $\pm .005$
ANGLES $\pm .5^\circ$

APICAL INDUSTRIES
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

EC145 CABLE CUTTERS KIT

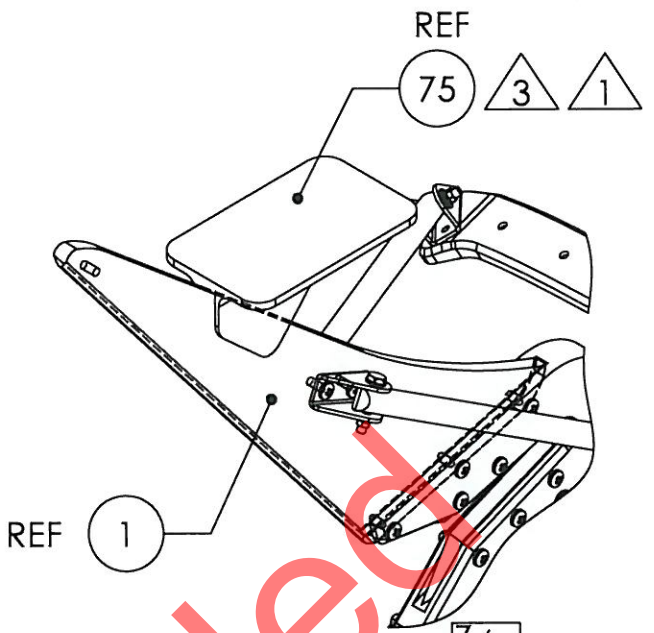
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| SIZE | CAGE CODE | DWG. NO. | REV. |
| B | 07M26 | 647.1300 | C |
| SCALE NONE | | | SHEET 7 OF 9 |

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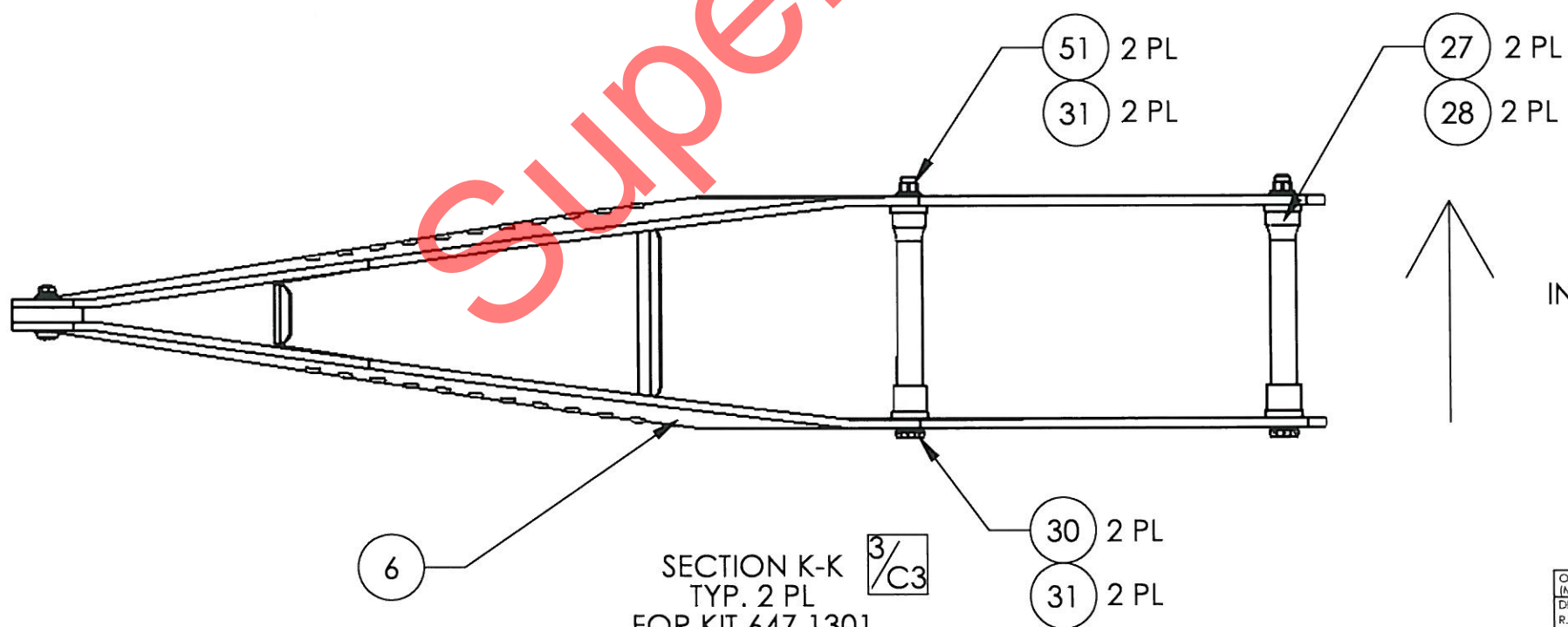


- A/R (26)
- A/R (71)
- A/R (72)

SECTION O-O $\frac{7}{A6}$



DETAIL D $\frac{7}{A6}$
SHOWN ISOMETRICALLY
TYPICAL GPS MOUNT KIT INSTALLATION



↑
INBOARD

(6)
SECTION K-K $\frac{3}{C3}$
TYP. 2 PL
FOR KIT 647.1301

| | | | |
|---|--|--|--|
| ORIGINAL DATE (MO-DA-YR) 07/06/09 | | APICAL INDUSTRIES | |
| DRAWN BY R. ROSANO | | 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 | |
| CHECKER D. BARKER | | EC145 CABLE CUTTERS KIT | |
| DRAWING APPROVAL P. BRAVO | | SIZE B CAGE CODE 07MZ6 DWG. NO. 647.1300 REV. C | |
| 07/06/09 | | SCALE NONE SHEET 8 OF 9 | |
| CONTRACT No. | | | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS $\pm .01$ 3 PLACE DECIMALS $\pm .005$ ANGLES $\pm .5^\circ$ | | | |

1 2 3 4 5 6 7 8

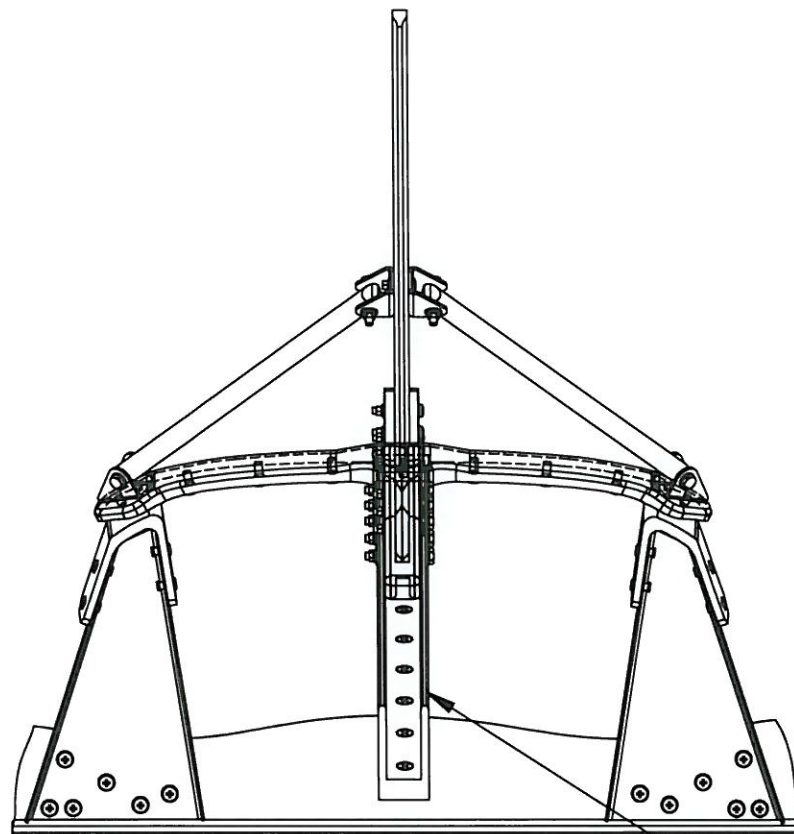
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A

B

C

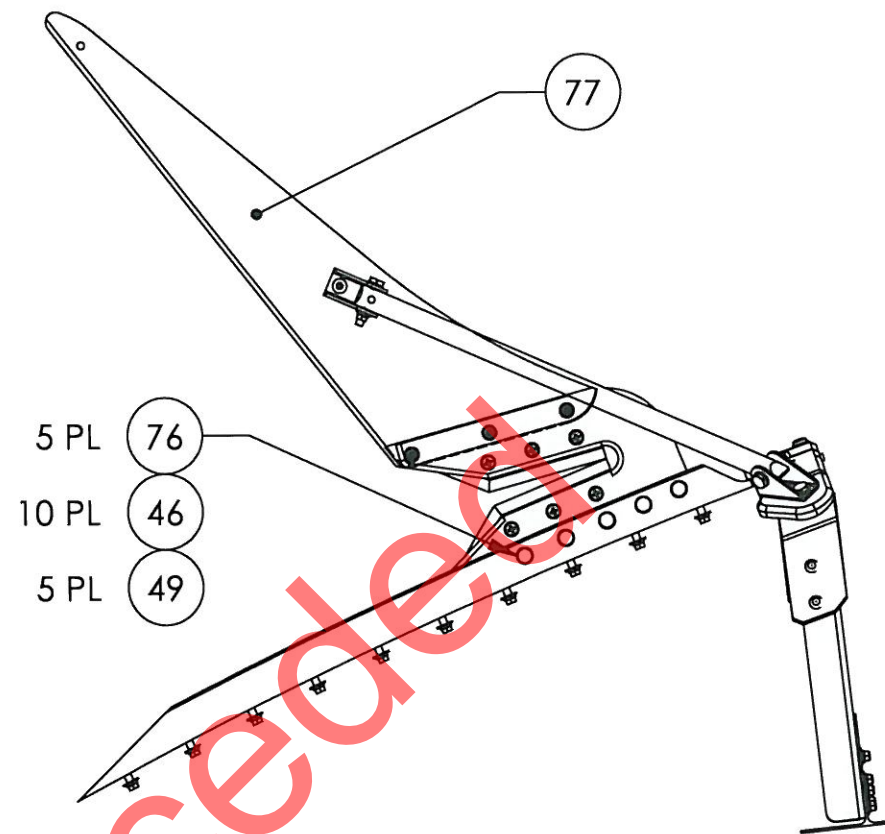
D



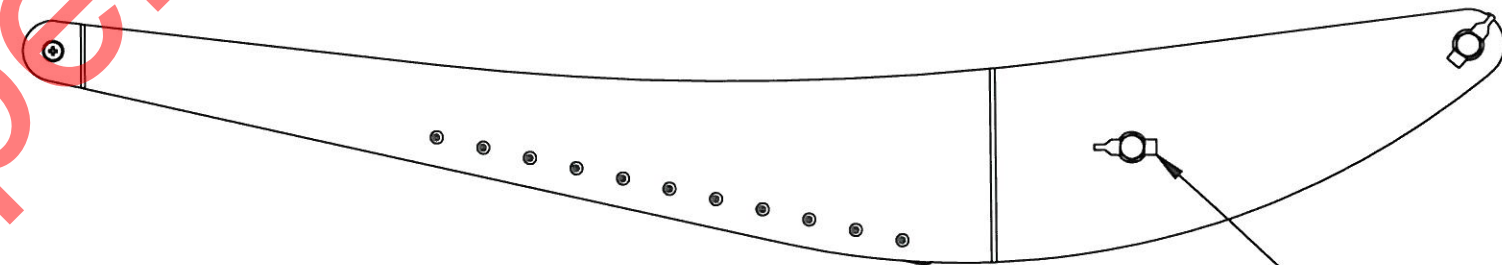
DETAIL A
WITH U CHANNEL

84

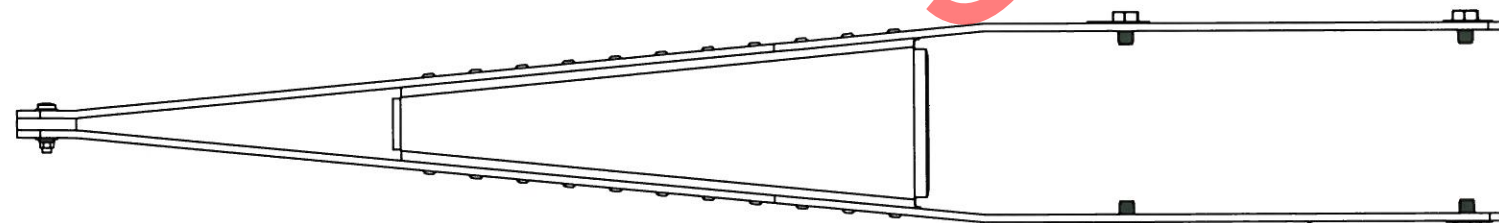
3/B3



5 PL 76
10 PL 46
5 PL 49



83 4 PL



4 PL 82
647.1702
DETAIL K
ALTERNATE CONFIGURATION

3/D3

7

| | | | |
|--------------------------------------|--------------------|--|--------------|
| ORIGINAL DATE (MO-DA-YR) 07/06/09 | | APICAL INDUSTRIES | |
| DRAWN BY R. ROSANO | | 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300 | |
| CHECKER D. BARKER | | EC145 CABLE CUTTERS KIT | |
| DRAWING APPROVAL P. BRAVO | | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | |
| 07/06/09 | | TOLERANCES ARE: | |
| CONTRACT No. | | 2 PLACE DECIMALS ±.01 | |
| | | 3 PLACE DECIMALS ±.005 | |
| | | ANGLES ±.5° | |
| SIZE B | CAGE CODE 07MZ6 | DWG. NO. 647.1300 | REV. C |
| SCALE NONE | | | SHEET 9 OF 9 |